

Remarks

For the Claims:

Applicant originally submitted claims 1-8. A first Office Action, dated 12 May 2004, rejected claims 1-8. A First Amendment, dated 2 August 2004, canceled claim 8, amended claims 1, 3, 5, and 6, added claim 9, and retained claims 2, 4, and 7 as originally submitted. A second Office Action, dated 16 November 2004, rejected claims 1-7 and 9. A second Amendment, dated 1 February 2005, canceled claim 9 and amended claims 1-7. A third, and final, Office Action, dated 9 May 2005, rejected claims 1-7. An Amendment After Final Rejection, dated 20 July 2005, amended claims 1, 3, 5, and 6, retained claims 4 and 7 as previously presented, and canceled claim 2. A fourth, non-final Office Action, dated 11 August 2005, rejected claims 1 and 3-7. An Appeal Brief, dated 29 December 2005, was filed in response to the fourth, non-final Office Action. A Notification of a Non-Compliant Appeal Brief, dated 17 March 2006, alleged that the brief did not contain an evidence appendix and a related proceedings appendix. In response, an Appellant's Amended Brief, dated 20 March 2006, added an Evidence Appendix (Appendix C) specifying no evidence and added a Related Proceedings Appendix (Appendix D) specifying no related proceedings. In response to the Appeal Brief, this fifth, non-final Office Action, dated 16 June 2006, reopens prosecution of the above-identified and rejects claims 1 and 3-7. This Amendment amends claims 1 and 6 and retains claims 3-5 and 7 as previously presented. Applicant respectfully requests reconsideration in view of the following remarks.

Applicant respectfully requests the examiner to note that the current Office Action is the fifth Office Action and examination

undertaken in this matter. The examiner is further, respectfully, requested to note the guidelines under which patent examiners are required to operate as set forth in MPEP 707.07(g), namely that "[p]iecemeal examination should be avoided as much as possible."

The first Office Action rejected Applicant's claims under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101, and 35 U.S.C. §102 in view of O'Brien, and 35 U.S.C. §102 in view of Kosiba. The second Office Action also rejected Applicant's claims under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101, and 35 U.S.C. §102 in view of O'Brien, and 35 U.S.C. §102 in view of Kosiba. The third Office Action removes the rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101, but maintains the rejections under 35 U.S.C. §102 in view of O'Brien and 35 U.S.C. §102. The fourth Office Action removed the prior art rejections and rejected the claims under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101. The fifth Office Action, that follows reopening of prosecution after Appeal, now rejects the claims under 35 U.S.C. §112, first paragraph, and additionally rejects the claims under 35 U.S.C. §112, second paragraph. The rejections are summarized in the following table:

	1 st OA	2 nd OA	3 rd OA	4 th OA	5 th OA
112, 1 st					X
112, 2 nd	X	X		X	X
101	X	X		X	
102 O'Brien	X	X	X		
102 Kosiba	X	X	X		

The continued and prolonged prosecution of the present application poses a hardship on the Applicant. The examiner is respectfully requested to follow MPEP guidelines to avoid piecemeal prosecution.

Claims 1 and 3-7 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent Nos. 6,988,076 and 7,020,617. A terminal disclaimer is being filed in compliance with 37 CFR 1.321(c). Accordingly, Applicant believes the obviousness-type double patenting rejection to be overcome.

In addition, claims 1 and 3-7 were rejected under 35 U.S.C. §112, first paragraph, as based on a disclosure which is allegedly not enabling. Claims 1 and 3-7 were also rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Office Action alleges that independent claim 1 appears to miss certain method steps which are critical or essential to the practice of the invention, but are not included in the claims, thus (the claim) is not enabled by the disclosure.

Claim 1 is being amended to more clearly point out that which Applicant believes to be the invention. In addition, claim 1 is being amended along the lines suggested in this fifth Office Action to include allegedly missing steps. Claim 6 is being amended to correspond with the modifications to claim 1.

For the Examiner's convenience, claim 1 (as amended herein) is reiterated below along with remarks and notations indicating its disclosure in the specification of the above-identified application in order to provide clear and unambiguous evidence that the claimed subject matter is disclosed in Applicant's specification. Each of the sections of claim 1 are sequentially analyzed below and reference is respectfully directed to the replacement specification submitted in the first Amendment, dated 2 August 2004.

Claim 1:

1. (Currently Amended) In an enterprise planning model, a computer program residing in memory and executable by a processor, said computer program enabling visualization of an effect of a strategic constraint on a primary goal of an enterprise, said computer program instructing said processor to perform operations comprising:

selecting said primary goal of said enterprise planning model, ~~said primary goal being represented from~~ a plurality of primary goals; paragraphs [0079] and [0082]

Paragraph [0079] discloses at line 1 that the user selects a primary goal. Paragraph [0079], beginning at line 7, discloses that the goal(s) can be individually selected from a goals table. Paragraph [0082], beginning at line 6, discloses a plurality of objective functions corresponding to each of a plurality of predetermine goals will be stored and provided to the user on a display device.

Claim 1 (continued):

representing said selected primary goal by a primary objective function, said primary objective function depending upon being affected by a set of operational variables, each of said operational variables representing an operational decision that a user seeks to optimize in order to reach said primary goal; paragraphs [0031], [0081], [0082], and [0104]

Paragraph [0031], beginning at line 5, discloses that the primary goal is represented by a primary objective function which is dependent upon a set of operational variables. Paragraph [0031], beginning at line 7, further discloses that each of the operational variables represents a single operational decision

that the user seeks to optimize in order to reach the primary goal.

Paragraph [0081], beginning at line 1, also discloses that after the user selects the primary goal, the primary goal is represented by a primary objective function, Π . The primary objective function, Π , depends upon a set of variables $\{X_i\}$, each of which represent a single operational decision. An exemplary primary objective function for gross profit is also disclosed in paragraph [0081] and is defined in paragraph [0082]. Paragraph [0104], beginning at line 1, discloses the input to a Constraint Mapping routine includes the primary goal as represented by the primary objective function Π , the set of independent variables $\{X_i\}$ that affect the primary goal, and a mathematical definition are stored in memory and/or storage.

When paragraphs [0031] and [0081] are taken as a whole, it is readily apparent that the claim 1 recitation of "operational variables" (upon which the primary objective function depends) corresponds with the set of variables $\{X_i\}$. Moreover, the set of independent variables $\{X_i\}$ also corresponds with the operational variables.

Claim 1 (continued):

representing said strategic constraint by a constraint function, said constraint function ~~depending upon~~ being affected by a subset of said operational variables, and said strategic constraint being a factor that said user seeks to analyze in conjunction with said primary goal; paragraphs [0084] and [0087]

Paragraph [0084], beginning at line 1, discloses that where the user has selected a Strategic Objective, this acts as an additional constraint on the enterprise model. Thus, the term

"strategic constraint" is synonymous with the term "Strategic Objective" and will be referred to herein as strategic objective/constraint. Paragraph [0084], beginning at line 6, further discloses that the strategic objective/constraint is represented by a constraint function that depends on the same set of variables $\{X_i\}$, or subset thereof, that the primary objective function, Π , depends upon. Paragraph [0087] discloses that the strategic objective/constraint can be strategic factors that the user seeks to analyze in conjunction with the primary goal.

Claim 1 (continued):

constructing an effective objective function by ~~combining subtracting said constraint function weighted by a weighting factor from said primary objective function and said constraint function;~~ **paragraphs [0110] and [0111]**

Paragraph [0110] discloses that the routine constructs an effective objective function. Paragraph [0110] further provides a symbolic representation of the effective objective function, Π_{eff} , as follows:

$$\Pi_{eff} = \Pi - \phi\psi$$

Paragraph [0111], beginning at line 3, describes the construction of the effective objective function. In particular, paragraph [0111] discloses the effective objective function, Π_{eff} , is constructed by taking the primary objective function, Π , and subtracting the constraint function, ϕ , as weighted by the value of ψ . Thus, the symbol, ψ , represents the weighting factor of claim 1.

Claim 1 (continued):

optimizing said effective objective function with respect to said operational variables over a range of ~~weighting factors~~ values of said weighting factor for said constraint function to obtain operational decisions for said operational variables, said optimizing operation
optimizing said effective objective function for each of said ~~weighting factors in said range~~ values of said weighting factor; paragraphs [0106], [0108], [0112]-[0114], [0017], and [0118]

Paragraph [0106], beginning at line 1, discloses that the user selects the extend to which the strategic objective/constraint will affect the primary goal by entering a minimum value for the weighting factor, ψ^{\min} , a maximum value ψ^{\max} , and the resolution $\delta\psi$ which represents step increments to be tested between ψ^{\min} and ψ^{\max} . The minimum and maximum values of the weighting factor establishe a range of values of the weighting factor, as recited in claim 1. Paragraph [0108] initiates an optimization loop in which the weighting factor, ψ , takes on the values between ψ^{\min} and ψ^{\max} , incremented by $\delta\psi$ (the claimed "range of values of the weighting factor").

Paragraph [0113], beginning at line 1, discloses that the effective objective function is maximized (the claimed "optimizing") with respect to the independent variables. Of course, it is will known in mathematics optimization is concerned with finding the maxima and minima of functions, generally subject to constraints. Thus, disclosure of maximizing the effective objective function corresponds with Applicant's optimizing operation of claim 1. As discussed above, the independent variables of the operational variables, $\{X_i\}$. Paragraph [0113], beginning at line 3, and paragraph [0114] further disclose an exemplary technique for maximizing/optimizing the effective objective function, Π_{eff} , is by simulated annealing. Paragraph [0117] beginning at line 1, discloses that

the maximized/optimized value of the effective objective function and the resulting values for the independent (operational) variables, $\{X_i\}$, are stored in an optimum value table. The term "resulting values" utilized in the disclosure corresponds with the "operational decisions" since the term independent variables, $\{X_i\}$, corresponds with the operational variables, recited in claim 1. Paragraph [0118] discloses that the value of the weighting factor, ψ , is incremented and if the maximum weighting factor has not be reached, the routine loops back to (step 1202) to repeat the maximizing/optimizing operation for the next value of the weighting factor in the range of weighting factors.

Claim 1 (continued):

determining, from said optimizing operation, a plurality of outcomes of said primary objective function in response to said range of weighting factors; and
paragraph [0117]

Paragraph [0117] discloses the details of a step 1205 in which the maximized value of the effective objective function and the resulting values (the claimed "operational decisions") of the independent variables (the claimed "operational variables") are output from the maximizing/optimizing step 1204. Paragraph [0117], beginning at line 4, further discloses that the value of the primary objective function is determined from these operational variables. Of course, as discussed above, paragraph [0118] discloses a loop back and repetition of the optimizing operation 1204 for each of the values of the weighting factors. Consequently, repetition of step 1205 results in the determination of a plurality of outcomes of the primary objective function in response to the range of weighting factors.

Claim 1 (continued):

presenting a graphical view of said plurality of outcomes of said primary objective function versus values of said constraint function corresponding to said ~~weighting factors~~ values of said weighting factor such that effects of said strategic constraint on said primary goal can be readily perceived by ~~[[a]]~~ said user to manage said enterprise. **paragraph [0117] and [0119]**

Paragraph [0117], beginning at line 7, discloses that the values of the primary objective function, Π , constraint function, ϕ , and weighting factor, ψ , are stored in a Constraint Overview Table. Paragraph [0119], beginning at line 1, discloses that the information stored in the Constraint Overview Table provides a concise summary of the effect that the Strategic Objective/Constraint will have on the Primary Goal. Paragraph [0119], beginning at line 5, further discloses that this data may be store in a file, or printed, or passed on to another routine. For example, paragraph [0119], beginning at line 7, since the Constraint Overview Table contains various primary goal values for each set of values determined from the strategic objective, the data may be used as input to a visualization routine. In one embodiment, the user is provided with a graphical view of the dependence of the primary goal on the target value of the strategic objective/constraint.

Claims 3-7 are not reiterated herein because they depend from claim 1 and because the Office Action provided no discussing whatsoever concerning any 35 U.S.C. 112 problem in these claims. However, further analysis of the specification and the invention of claims 3-7 reveals that the features of claims 3 and 4 are disclosed in paragraphs [0131] through [0144]. Similarly, the features of claim 5 are disclosed in paragraphs [0095] and [0096], the features of claim 6 are disclosed in paragraphs

[0106] through [0108], and the features of claim 7 are disclosed in paragraph [0079]. As stated in Williams Service Group Inc. v. O.B. Cannon & Son Inc., 33 U.S.P.Q.d 1705, 1723 (Pa. 1994):

The test of enablement is whether a person of ordinary skill in the relevant art, using his or her knowledge and the patent disclosure, could make, and use the invention without undue experimentation.

As noted above, the elements of the invention of claims 1 and 3-7 are disclosed in Applicant's specification. Moreover, disclosure in the specification is sufficient to enable those skilled in the art as to how to make and use the claimed invention without undue experimentation. As such, Applicant believes the specification to be enabling and the claims to be valid. Accordingly, Applicant believes that modifications to claims 1 and 6 and the above-presented remarks overcome the rejections of claims 1 and 3-7 under 35 U.S.C. §112, first paragraph, and under 35 U.S.C. §112, second paragraph. All prior art rejections from the previous four Office Actions have been overcome, so claims 1 and 3-7 should now be found allowable.

The Manual of Patent Examining Procedure instructs examiners to provide clear and complete Office Actions throughout the examination process. Moreover, when making rejections such as lack of an adequate written description, the Examiner's position should be fully developed and contain detailed reasons rather than a mere conclusion. (See M.P.E.P. 706.03). Through the amendment presented herein and the above-presented remarks, applicant has made every effort to address all detailed reasons presented in the Office Action.

But the detailed reasons presented in the Office Action are all directed to claim 1. The Office Action does not develop a line of reasoning supporting the rejections of claims 3-7.

Accordingly, should the Examiner disagree with the remarks presented herein, the Examiner is respectfully requested to more specifically point out what might be believed to be any remaining deficiencies in the claims such that any remaining issues are readily apparent and/or to suggest modifications to the claims that would materially advance prosecution of this case. Should it be determined that dialogue may be a more efficient way of clarifying any remaining issues, the Examiner is respectfully invited to call the attorney listed below to discuss this matter.

Accordingly, this Amendment amends claims 1 and 6, and retains claims 3-5 and 7. Currently amended claims 1 and 6 and previously presented claims 3-5 and 7 remain in the application and are believed to be allowable.

Applicant believes that the foregoing amendments and remarks are fully responsive to the rejections and/or objections recited in the 16 June 2006 Office Action and that the present application is now in a condition for allowance. Accordingly, reconsideration of the present application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, reading "Lowell W. Gresham", written in a cursive style. The signature is positioned above a horizontal line.

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